

In re: Michael J. Collins et al.
Serial No. 10/065,173
Filed: September 24, 2002
Page 3

REMARKS

This is in response to the Official Action mailed October 17, 2003 (Paper No. 7). Applicant notes with appreciation the Examiner's careful review of the pending claims.

In Paper No. 7 the Examiner has removed the grounds of rejection that were applied in the previous office action (Paper No. 5) and has instead rejected the claims on the basis of a combination of the Thompson article combined with either the Collins '132 patent or the Bostian article and thereafter combined with the Jerosch-Herold '124 patent.

In partial response, claim 1 has been amended to now include the recitations of claim 4 as originally pending; i.e., that the pad is hydrophilic and lipophilic in addition to being substantially transparent to microwave radiation and free of atoms that would interfere with the proton NMR response of the sample. Claim 4 has accordingly been cancelled.

The Thompson article discloses the analysis of an inorganic (rather than organic) sample that is placed in a porous clay ("Alundum") thimble. A Teflon rod (150 mm long and 25 mm in diameter) is used to insert and remove the clay thimble into and from the NMR device. Presumably, if this thimble holder is permitted to remain with the sample during NMR analysis, it will avoid interfering with the NMR. Thompson is not clear on this point. A cylindrical tool is, of course, quite nonanalogous to a wrapped sheet. Thus, the common factor (Teflon) illustrates the hindsight nature of selecting Thompson for its argued purpose in this combination.

Collins '132 and Bostian are similar to one another in that both disclose the analysis of food or similar organic samples on either filter paper (Collins) or a glass fiber pad (Bostian). Neither, however, carries out any steps with the paper or pad that would require—and thus neither suggests—a further wrap in an NMR-transparent material.

Jerosch-Herold '124 analyzes an inorganic sample wrapped in Teflon tape. In particular, the Jerosch-Herold '124 patent describes a method of determining the fluid flow permeability of porous media (e.g., "loose sediments and sedimentary rocks,"

In re: Michael J. Collins et al.
Serial No. 10/065,173
Filed: September 24, 2002
Page 4

column 1 line 36) using nuclear magnetic resonance. In order to carry out its analysis, the '124 patent requires that the porous media be "saturated with a liquid" during the analysis. This requirement is found in claim 1, in the Summary of the Invention (column 3 beginning at line 45), and in the "Experimental Procedure" (column 8 beginning at line 37). In particular, the "Experimental Procedure" describes placing the samples in sealed containers and "imbibing" them with water for "several hours."

Accordingly, when presented with these four references—two of which are unrelated to fat and oil analysis of organic samples—the skilled person is given the choice of an inorganic sample in a clay sample holder (Thompson), an organic sample in a filter paper or glass fiber pad (Collins or Bostian), or an inorganic sample soaked with liquid and wrapped in Teflon tape (Jerosch-Herold). The combination, however, produces inoperative results, because the sample described in the Jerosch-Herold '124 patent must be saturated with liquid in order to obtain the desired NMR measurement. In contrast, the use of the Collins or Bostian filter paper or glass fiber pads, or indeed the lipophilic and hydrophilic pad of the claimed invention, would remove liquid from Jerosch-Herold's saturated sample, thus ruining Jerosch-Herold's resulting measurements.

Stated differently, maintaining Jerosch-Herold's saturated sample would be impossible in the presence of the Collins or Bostian filter paper or glass fiber pad. Jerosch-Herold's Teflon wrap fails to solve the problem raised by the proposed combination because in order for Jerosch-Herold's method to work, the porous sample—rather than its wrap—must hold the liquid. In contrast, in the claimed invention the fats and oils will respond to NMR analysis whether present in the original organic sample or absorbed into the pad.

Accordingly, because the use of the Collins filter paper or the Bostian glass fiber pad, or indeed the hydrophilic pads of the claimed invention would render the Jerosch-

In re: Michael J. Collins et al.
Serial No. 10/065,173
Filed: September 24, 2002
Page 5

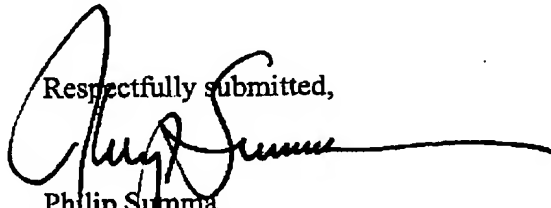
Herold method inoperable, the combination is likewise inoperable and the skilled person would not use it.

Therefore, the Office's combination directs the skilled person away from, rather than towards, the claimed invention.

Applicant respectfully submits that the references have been applied in hindsight with the Office merely selecting the desired elements from each reference while ignoring the overall teaching of the references and similarly ignoring the overall frustration of purpose that the combination would bring.

Therefore, Applicant submits that the combination fails to render the pending claims obvious and respectfully requests that the Office pass the claims to allowance at the earliest possible date.

Respectfully submitted,



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I hereby certify that this correspondence is being transmitted by facsimile to the U.S. Patent and Trademark Office, c/o Technology Center 1700, Attn: Examiner Yelena G. Gakh, Ph.D., at facsimile number 703-872-9306 on April 19, 2004.



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